Montana Bald Eagle Management Guidelines:
An Addendum to Montana Bald Eagle Management Plan (1994)

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PURPOSE AND INTENT

This addendum to the Montana Bald Eagle Management Plan (1994) was prepared to address recent changes in federal bald eagle regulations. The 1994 Plan still provides the most comprehensive discussion of bald eagle conservation in Montana. Information covered in the 1994 Plan is not repeated here.

Bald eagles (*Haliaeetus leucocephalus*) in Montana were removed from the U.S. Fish and Wildlife Service (USFWS) list of Threatened and Endangered Species in 2007. Although bald eagles no longer receive protection from the Endangered Species Act, two pieces of federal legislation still provide protection: 1) the Bald and Golden Eagle Protection Act (BGEPA) and 2) the Migratory Bird Treaty Act (MBTA). These two acts provide the legal foundation for the National Bald Eagle Management Guidelines developed by the USFWS (2007) and prohibit killing, selling, or otherwise harming eagles, their nests, or their eggs. The national guidelines provide landowners and land managers with a set of recommendations to reduce the potential of disturbing eagles and to encourage land management practices that may benefit eagles. Although the USFWS guidelines are applicable throughout the United States, more protective state guidelines are often appropriate in areas where bald eagles have displayed greater sensitivity to human activity, and in the relatively open landscapes of the western states (USFWS 2007). This document addresses those concerns and establishes recommended guidelines for bald eagles in Montana.

Although compliance with federal and state guidelines is voluntary, disturbance of eagles is prohibited by law. These guidelines are recommendations based on the best available science and proven conservation measures that minimize disturbance to bald eagles. They are designed to provide land management agencies, land use planners, biologists, developers, and others with recommendations for minimizing the potential of violating federal and state regulations. Compliance with these guidelines does not remove liability if bald eagles are disturbed while completing an activity or project. However, federal and state agencies may focus on investigating and prosecuting individuals and companies that disturb bald eagles without regard for their actions or fail to implement conservation measures recommended in these guidelines.

REGULATORY MECHANISMS

**Bald and Golden Eagle Protection Act**

The Bald and Golden Eagle Protection Act (BGEPA) prohibits anyone from taking bald eagles, their eggs, bald eagle parts, or their nests without a permit issued by USFWS. A recently clarified definition explicitly defines disturbance (72 Federal Register 31132) and protects bald eagles from impacts of human initiated activities primarily around active, alternate, and historic nest sites. The definition of “disturb” includes any activity that will cause, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. Civil penalties for violation of BGEPA start at $100,000 or two years imprisonment or
both for a first violation. Felony convictions carry a maximum fine of $250,000 or two years imprisonment or both. Fines are doubled for organizations.

New regulations under BGEPA allow for the limited take of bald eagles, or their nests, when the take is associated with otherwise lawful activities and the take would be compatible with the preservation of the bald eagle (74 Federal Register 46835). Take is defined as actions including to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect or molest or disturb bald eagles. Compatible with the preservation of the bald eagle means the actions would have to be consistent with the goal of stable or increasing populations. Under these regulations the USFWS may issue take permits, based on regional population thresholds, to allow take that results in mortality of eagles or an eagle nest under special circumstances. The final rule regarding take permits was published in the Federal Register on September 11, 2009. Information on the types of permits, permit application process, required monitoring, mitigations requirements, and the application review process are available on the USFWS website. Federal permits are only valid if the permit holder complies with all state and tribal regulations. A state permit may be required. Contact your nearest Montana Fish, Wildlife and Parks office for information on Montana’s current regulations with respect to eagles.

**Migratory Bird Treaty Act**

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take any migratory bird, their eggs, their part, or any bird nest except as permitted (such as waterfowl hunting licenses, falconry licenses, or bird banding permits) by USFWS. The definition of take under the MBTA includes any attempts or acts of pursuing, hunting, shooting, wounding, killing, trapping, capturing, possessing, or collecting. Misdemeanor convictions carry a $15,000 fine or six-month imprisonment or both. The maximum penalty per violation of the MBTA is two years imprisonment and a $250,000 fine.

**State Regulations**

The State of Montana also has regulations in place to protect bald eagles. The Nongame and Endangered Species Act (MCA 87-5) mandates that the state “provide adequate remedies for the protection of the environmental life support system from degradation and provide adequate remedies to prevent unreasonable depletion and degradation of natural resources.” This Act has similar language to the MBTA and states “it is unlawful for a person to hunt, capture, kill, possess, purchase, offer or expose for sale, ship, or transport any wild bird, other than a game bird, or any part of the plumage, skin, or body of the bird, irrespective of whether the bird was captured or killed within the state, or to take or destroy the nest or eggs of a wild bird, except under a certificate, falconer's license, or permit issued by the director” (MCA 87-5-201). The penalty for a first conviction is a fine of up to $250. Penalties increase and may include jail terms with subsequent convictions. A state permit may be required for activities related to take or disturbance of eagles. Interested parties are encouraged to contact Fish, Wildlife and Parks prior to applying for a federal take permit.
RECOMMENDED GUIDELINES

The USFWS National Bald Eagle Management Guidelines recommend relatively small buffers around important eagle habitat and may be more appropriate for management of bald eagles in eastern states like Florida and Michigan. Both these states have much higher bald eagle (>1,100 nests) and human populations. In Montana, most bald eagle nests are located in rural areas with lower levels of development and disturbance. Bald eagles nesting in rural areas often are more sensitive to human activity than eagles that have chosen to build nests in the vicinity of pre-existing human activity (Millsap et al. 2004).

Any activity that disrupts breeding, feeding, sheltering, and roosting behavior and causes, or is likely to cause, nest abandonment or reduced productivity, is considered disturbance and is a violation of the BGEPA and state regulations. Appropriate management recommendations must consider when and why bald eagles respond to human activity. Some seemingly benign human activities, such as hiking, may have greater potential to disturb bald eagles than watercraft, vehicles, or loud activities (Grubb and King 1991). Regardless of the activity type, the underlying common factor in most cases where bald eagles show response to human disturbance is that the disturbing activity was visible from the nest. Vegetative cover often conceals human activities and may reduce disturbance potential on bald eagles (Stalmaster and Newman 1978). In areas where dense vegetative understory and overstory are absent eagles respond to human activity at great distances. Disturbance may result when human activity is unusually loud (e.g. fireworks or personal watercraft) or the activity breaks from the normal pattern of human use in the vicinity of the nest. For example, eagles nesting in agricultural areas may tolerate the operation of loud farm equipment nearby, but become defensive when a person walks close to the nest tree.

We recommend seasonal restrictions and visual and distance buffers around nest, foraging, and roost sites to minimize disturbance to bald eagles. Some activities may warrant a combination of seasonal restrictions and buffers to ensure compliance with regulations. The first buffer is a visual buffer that is based on whether the human activity is visible from the nest. The second buffer is a distance buffer determined by the type of activity. We provide our recommendations in the following text and summarized in Table 1.

Modifications of these guidelines are allowable through the development of site-specific management plans. A framework for the development of the site-specific plan is presented in Appendix VII of the Montana Bald Eagle Management Plan (1994). We recommend a biologist familiar with bald eagle management and ecology develop the site-specific management plan.

Seasonal Restrictions

Responses of bald eagles to human activities can be highly variable. Regardless of this variability there are well-established time-periods during which bald eagles are more sensitive to land management and human activities and are particularly vulnerable to disturbance (Fig. 1). Seasonal buffers provide individuals and organizations options to conduct activities outside of the sensitive periods (Fig. 1) so that short-term disturbance may be mitigated or avoided. **The recommended primary seasonal restriction is from approximately February 1 through August 15th.** However, bald eagles nesting in habitat with later nest initiation dates due to
elevation or weather (e.g. Glacier and Yellowstone National Parks) may benefit from activity limitations beyond August 15th due to later nest initiation dates.

**Note:** Seasonal restrictions will not apply to unoccupied or alternate nest sites. Seasonal restrictions also do not apply if eagles have fledged, nesting has failed, eagles have left the nesting area, or if eagles have demonstrated a tolerance to the activity. Unoccupied or alternate nest sites should be protected from longer-term disturbance by implementing appropriate distance buffers (see below).

Recommended seasonal restrictions from **approximately February 1st through August 15th** for the following activities (See Table 1):

- Construction and maintenance including buildings roads, trails, or any other outside construction within direct line of sight of an active nest.
- Loud noises including fireworks, blasting, and operation of forest harvest machinery (skidders, trucks, chainsaws, etc.), jackhammers, construction equipment, etc.
- Forest management activities, thinning, and fuels reduction including all activities associated with the removal forest vegetation around occupied nests.
- Concentrated recreation including, but not limited to, hiking, bird-watching, fishing (on and offshore), hunting, boating and use of personal watercraft.

![Figure 1. Time periods for relative sensitivities of bald eagles to human activities in Montana.](image-url)
Visual Buffers

Bald eagles exhibit greater sensitivity to disturbance when activities occur within full view of the bird (Grubb and King 1991). Therefore, existing visual buffers within ¼ mile of nest sites should not be removed, but enhanced if possible. (See Table 1 for distance conversions.) Effective visual buffers should take into consideration topography, ecological characteristics, historical and proposed land use, human activity patterns, and the nesting pair’s level of tolerance for disturbance. In some cases this may deviate from the standard recommendation. Examples of alterations to visual buffers include, but are not limited to land clearing, the construction of new houses, power line construction, timber harvest, and fuels reduction.

Recommended activities for visual buffer maintenance and enhancement (See Table 1):

- Managing forest and riparian habitats to protect and enhance important habitat components (i.e. perch trees, visual screening, etc.).
- Thinning around large potential or active bald eagle nest trees to protect them from crown fires. Thinning should be done so as not to compromise visual buffers between nest trees and potential human disturbance.
- Placing new construction (homes, buildings, trails, boat launches/marinas, etc.) only in areas where visual buffers around nests can be retained.
- Retaining a natural buffer around active nests, alternate nests, and large live trees and snags during fire protection activities that meet Wildland Urban Interface safety requirements and recommendations while providing visual security for bald eagles.

Figure 1. The house in these figures represents a human activity that may disturb bald eagles. Any activity that may disturb bald eagles can replace the house in the illustration. Example A represents a scenario where the visual buffer is inadequate. Example B represents a scenario where the visual buffer is adequate. Notice how the line of sight in Example B is obstructed by existing vegetation. The distance between a disturbing activity and bald eagles depends on a variety of factors.
Distance Buffers

Potentially disturbing activities should not occur within 1/2 mile of active and alternate nests (for territories occupied within the last five years), although some activities may produce less disturbance and recommended distances might be decreased in areas where visual buffers obstruct the direct line of sight between activities and nests, perches, and roosts (Table 1). In addition, in areas where sources of disturbance pre-date eagle occupancy, where eagles have developed a tolerance for routine human activities, or where activities similar to the proposed activity exist distance buffers may be reduced (Table 1). Any reductions to our recommended distance buffers should be done in consultation with a qualified biologist and justified in site-specific plans. **Distance buffers are intended to apply to activities near nest sites, concentrated foraging areas, and communal roost sites during the appropriate season of eagle use (Fig. 1).** Bald eagles concentrate in areas with abundant food resources during the non-breeding seasons. Roost sites near open rivers and lakes can be used routinely in winter. These concentrated foraging areas and associated roost sites, when used, should receive similar protection as nest sites during the appropriate season of use.

Extending distance buffers may be necessary in open landscapes where visual buffers within 1/2 mile of nests are not possible. Buffers based on tolerance for routine human activities may be assessed through consultation with a qualified biologist. Tolerance may be evaluated based on proximity at which an eagle displays vigilance or avoidance behavior, agitation, and/or flushing. Reductions in distance buffers should be justified in site-specific management plans. Note that unoccupied nests are still protected by law and that destroying nests would violate both state and federal regulations.

Recommended distance buffers of in the absence of a visual buffer (See Table 1):

- **1/2 mile** for the following activities:
  - Any activity that will result in more than one house or permanent construction to include commercial use, buildings 3 or more stories high, activity that would increase human use, or project with a footprint greater than 1/2 acre.
  - Construction of new marinas with routine use by 6 or more boats.
  - Any use of explosives or activities that produce extremely loud noise, such as blasting, use of jackhammers or gravel crushing equipment, or fireworks.
  - Forest management activities that include harvesting and heavy truck traffic in areas that don’t normally have that type of activity.
  - Construction of new above ground power and utility lines.

- **1/4 mile** for the following activities:
  - Any permanent construction to include single home properties (<3 stories tall) and outbuildings.
  - Any construction of infrastructure such as roads and trails including dozer lines for fire management activities, except when specifically constructed to save a bald eagle nest from fire.
Forest management activities to including timber harvest layout, snag removal, prescribed fires, planting, and thinning.

- ¼ mile for recreation during the breeding season such as **non-motorized activities** including hiking, fishing, hunting, camping, rafting, wildlife watching, biking, as well as **motorized activities** including automobile use, off-road vehicle use, and boat and personal watercraft use. **Note:** Recreational activities that involve continued movement through an eagle territory (e.g., rafting) have minimal impacts on nesting bald eagles compared to activities that include stopping (e.g., camping, anchoring fishing boats) or constant human use within a bald eagle territory (e.g., popular hiking trails).

- ¼ mile or **1000 feet above nests** for helicopters and aircraft during the breeding season except for biologists conducting bald eagle nest surveys. Attempts should be made to coordinate bald eagle nest surveys between agencies/companies to reduce the potential for disruption of nesting activities due to duplicate surveys.

<table>
<thead>
<tr>
<th>Miles</th>
<th>Feet</th>
<th>Meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5280</td>
<td>1600</td>
</tr>
<tr>
<td>1/2</td>
<td>2640</td>
<td>800</td>
</tr>
<tr>
<td>1/4</td>
<td>1320</td>
<td>400</td>
</tr>
<tr>
<td>1/8</td>
<td>660</td>
<td>200</td>
</tr>
<tr>
<td>1/16</td>
<td>330</td>
<td>100</td>
</tr>
</tbody>
</table>

### ADDITIONAL RECOMMENDATIONS FOR BALD EAGLE CONSERVATION

**A more comprehensive discussion of bald eagle conservation recommendations can be found in the Montana Bald Eagle Management Plan (1994).**

#### Reduce the potential for human caused mortality

- Use lead free, non-toxic birdshot, bullets, and fishing tackle throughout Montana.

- Remove road-killed animals from alongside major roadways.

- Avoid pesticides where bald eagles may scavenge. To reduce secondary poisoning limit the use of anti-coagulants and other pesticides and ensure all herbicides, pesticides, and fertilizers are disposed of properly. All use of chemicals, including the application and handling, shall follow applicable state and federal laws.

#### Conserve Habitat

- Protect and preserve habitat as described in Montana Bald Eagle Management Plan (1994) especially within ½ mile of water.
• Protect patches of habitat for nesting and winter roosting.

• Actively manage forest stands to provide future nesting and foraging sites, and winter roost sites with an emphasis on retaining large trees and snags, and protecting habitat for fisheries, which are an important food source for eagles.

• Stimulate cottonwood regeneration with natural flow regimes, exclosures, and other tools.

• Encourage coordination among agencies and landowners to identify opportunities to modify land stewardship practices that may benefit bald eagles and improve bald eagle habitat.

• Evaluate effectiveness of bald eagle habitat enhancement activities and share effective management strategies with others.

**Minimize impacts of new and existing energy and communication infrastructure**

Additional conservation and management recommendations regarding utilities and avian interactions are available from the [Avian Power Line Interaction Committee](http://aplic.com).

• In areas where mid-span collisions are a problem, near rivers and streams, nest areas, or other flight corridors, bury powerlines whenever possible and ensure proper spacing and marking for above ground powerlines. Orient parallel transmission lines horizontally over stream crossings—don’t stack transmission lines vertically.

• Use anti-perching devices in areas of high prey abundance and concentrated powerlines to reduce electrocution of eagles.

• Position wind farms, communication towers, and high voltage power lines away from nests, foraging areas (areas with high populations of ground squirrels, fish, waterfowl, etc.), winter roost sites, areas where bald eagles may concentrate, or in migration corridors.

• Erect power transmission structures with a minimum of 60 in. between lines for bald eagles to minimize eagle electrocution.

• Ensure power transmission equipment installations are raptor safe by insulating bushing conductors, using covered jumper conductors, and covering arrestors and cutouts.

• Use existing roads and right-of-ways rather than build new ones whenever possible to reduce habitat fragmentation that can negatively affect eagle prey populations.
CONTACT INFORMATION FOR ASSISTANCE

Montana Fish, Wildlife & Parks
Region 1
490 North Meridian Road
Kalispell, MT 59901
406-752-5501

Montana Fish, Wildlife & Parks
Region 2
3201 Spurgin Road
Missoula, MT 59801
406-542-5500

Montana Fish, Wildlife & Parks
Region 3
1400 South 19th
Bozeman, MT 59718
406-994-4042

Montana Fish, Wildlife & Parks
Region 4
4600 Great Springs Road
Great Falls, MT 59405
406-454-5840

Montana Fish, Wildlife & Parks
Region 5
2300 Lake Elmo Drive
Billings, MT 59105
406-247-2940

Montana Fish, Wildlife & Parks
Region 6
54078 US Hwy 2 W
Glasgow, MT 59230
406-228-3700

Montana Fish, Wildlife & Parks
Region 7
352 I-94 Business Loop
Miles City, MT 59301
406-234-0900

U. S. Fish and Wildlife Service
Montana Field Office
585 Shepard Way
Helena, MT 59601
406-449-5225

U. S. Fish and Wildlife Service
Billings Field Suboffice
2900 4th Avenue North, Room 301
Billings, MT 59101
406-247-7367

U. S. Fish and Wildlife Service
Kalispell Field Suboffice
780 Creston Hatchery Road
Kalispell, MT 59901
406-758-6868
Table 1. Recommended distance buffers (with or without) visual buffers and seasonal restrictions for bald eagle nests (active and inactive), concentrated foraging areas, and winter roost sites based on activity type.

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Recommended Area Buffer When No Visual Buffer Present: Activity is Visible from Nest</th>
<th>Recommended Area Buffer When Visual Buffer Present: Activity is not Visible from Nest</th>
<th>Seasonal Restrictions(^2) Recommended (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Single buildings, including single family homes with outbuildings</td>
<td>1/4 mile or as close as existing tolerated similar activity(^1)</td>
<td>1/8 mile or as close as existing tolerated similar activity(^1)</td>
<td>(Y)-No thinning, clearing, &amp; external construction during breeding season.</td>
</tr>
<tr>
<td>2. Linear Construction (roads, trails, pipelines, powerlines)</td>
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<td></td>
<td></td>
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<tr>
<td>3. Forest management that includes harvest layout, prescribed fire, planting, and thinning</td>
<td>1/2 mile or as close as existing tolerated similar activity(^1)</td>
<td>1/4 mile or as close as existing tolerated similar activity(^1)</td>
<td>(Y)-No thinning, clearing, &amp; external construction during breeding season.</td>
</tr>
<tr>
<td>4. Forest management that includes harvest layout, prescribed fire, planting, and thinning</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5. Forest management that includes harvest layout, prescribed fire, planting, and thinning</td>
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<td></td>
<td></td>
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<tr>
<td>6. Above ground utility lines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td>1/4 mile</td>
<td>1/8 mile</td>
<td>(Y)-Limit recreational activities during the breeding season where eagles do not demonstrate tolerance.</td>
</tr>
<tr>
<td>1. Non-motorized Recreation (Hiking, Fishing, Camping, Rafting, Wildlife Watching, Biking, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Motorized Recreational Equipment (Boats, Personal Watercraft, Off-road Vehicles, etc.)</td>
<td>1/2 mile</td>
<td>1/4 mile</td>
<td></td>
</tr>
<tr>
<td>Helicopter or Aircraft</td>
<td>1/4 mile or 1000 ft above nest</td>
<td>1/4 mile or 1000 ft above nest</td>
<td>(Y)-Limit flights during the breeding season except where eagles have demonstrated tolerance.</td>
</tr>
<tr>
<td>Blasting and other loud noises</td>
<td>1/2 mile</td>
<td>1/2 mile</td>
<td>(Y)-Restrict loud activities during the breeding season except where eagles have demonstrated tolerance.</td>
</tr>
</tbody>
</table>

\(^1\) A similar activity is defined as an existing activity that has a comparable footprint and equivalent human disturbance, whether direct or indirect, of the proposed activity. For additional explanations please contact Montana Fish, Wildlife and Parks or U.S. Fish and Wildlife Service.

\(^2\) The recommended seasonal restriction occurs from approximately February 1 through August 15th.
REFERENCES


WEB SITES VISITED

http://www.fws.gov/le/pdffiles/BEPA.pdf

http://www.fws.gov/migratorybirds/baldeagle.htm

http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BaldEagle/ApplicationandReports.html